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AMERICAN VETERINARY REVIEW,

JUNE, 1880.

ORIGINAL ARTICLES.

STUDY ON CRIBBING—CAUSES—MEANS OF PREVENTION AND CURE.

BY M. CH. MARTIN.

Cribbing is a vicious habit consisting, in the horse, in an abnormal inspiration of air, which is always followed by *ingurgitation* and frequently by the *swallowing* of that gaseous fluid.

This vice impairs the functions of digestion and nutrition, often producing colic and emaciation in the affected animal, and by seriously diminishing his power of continued labor, depreciates his value while forming the habit, and renders him wholly worthless when it has become confirmed and established.

The horse cribs *with or without* taking a point of rest, but what characterizes essentially the vice, is the *noise*, or *eructation* produced by the shock of the air against the walls of the pharynx at the time of aspiration.

Cribbing with *ingurgitation*, or when the air does not go beyond the pharynx, is in itself a serious vice, but accompanied by *deglutition* is much more so, because the air, after passing beyond the pharynx, follows the æsophagus, and entering the stomach, penetrates into the intestines. It is this form of cribbing which impairs digestion and nutrition, with consequent debility and emaciation, ending in premature death.

The determining or efficient cause of cribbing is the depression and sudden dilatation of the pharynx, produced by the contraction of the sterno-hyoideus and sterno-thyroiodeus muscles. These muscles do not act, it is true, immediately upon the pharynx, but their fixed point being at the sternum, their contraction lowers the hyoid and the larynx, to which the pharynx is so intimately connected that the hyoid and larynx can not be lowered and brought nearer the sternum without carrying with them in the same motion, the pharynx.

Before going further in the study of cribbing and of its occasional causes, let us examine closely a cribber, and initiate ourselves into the *organic mechanism* of this unnatural act, taking for type the *cribbing with point d'appui* which is most frequent.

II

The horse which *cribs with point d'appui*, seizes the feed-box or hay-rack with its incisives in order to immobilize its head by resting it; most commonly upon the superior incisors. In this position, the lips are wide apart and the mouth open; he then contracts suddenly all the flexor muscles of the neck, the sterno hyoideus and thyroideus muscles engaging in the same action, and drawing the pharynx inwards. This lowering motion elongates this canal, dilating it lengthwise, and the air that it may contain is thus rarified. It is at this moment that the atmospheric pressure, acting in the open mouth, the outside air raises the velum palati and rushes rapidly into the pharynx, thus producing that *noise* which is nothing more than the effect of the collision of the air upon the pharyngeal walls.

The mouth being wide open, the sudden contraction of the sterno-hyoideus and thyroideus muscles, the lowering of the phar-

ynx resulting from it, and the dilatation of this organ, constitute then, all the anatomical mechanism of cribbing.

In examining the cribber, nothing is more evident than the depression of the larynx carrying on the pharynx, and it is very easy to notice that the eructation follows immediately this dilating depression of the pharynx, and that these two phenomena are almost simultaneous; one may say of eructation on account of its relation with the depressions: *post hoc, ergo propter hoc.*

III

To have an exact idea of the effects of cribbing and of its mechanism, I tried myself to crib and I succeeded perfectly. To do it, I sat down, rested my elbows on a table, and, to keep my head steady and immobile and my mouth partly open, I rested my upper teeth on my thumbs. In this attitude I suddenly lowered my pharynx. Immediately I felt air passing through my mouth, raising my soft palate and rushing upon the walls of my pharynx, producing a well-marked noise of eructation. I kept on for several minutes and I *ingurgitated* and swallowed air at will.

I then cribbed easily *without appui*, by keeping my head steady, my mouth open and lowering my pharynx suddenly. Then I closed my mouth and kept up the same depression of the pharynx. Air then rushed into my fauces through the nose, and the same eructation was plainly heard. Is it not in that manner that the horse cribbs when, with his mouth closed, he rests his chin on the feed box or manger?

What in cribbing is called eructation is then the effect of an aspiration of air and not a regurgitation, a return of gas; it is an eructation in an inverse direction.

IV

When air, by the act of cribbing, is introduced into the pharynx, if it does not go beyond that canal so far as to penetrate the oesophagus, in other words, if it is only *ingurgitated*, it will be thrown back or returned outside by the nasal cavities in the expiration following the eructations; as the horse which is about to

crib takes first an inspiration, respiration is stopped at the moment where the belch is heard, and then the ingurgitated air is forced outward in the subsequent exhalations.

If the air is swallowed, it follows the œsophagus, penetrates into the stomach and the intestines, and if the animal keeps on for fifteen minutes or more, meteorism, tympanitis and colics make their appearance.

V.

Some 175 years ago, Solleysel wrote that *cribbing was a habit in which the horse swallows air*: but he had not proved it.

For perhaps half a century, the most erroneous ideas have been published on the nature and the causes of this affection. Several authors have written:

1st. *That cribbing was the noisy expulsion by the mouth of odoriferous gases coming from the stomach and the intestines.*

Refutation. During the many hours when I have watched cribbers, I have never found the herbous odor, given to the returned gases. When the horse ejects gases or liquid matters from the stomach (as is seen in some colics), the vomiting takes place through the nasal passages, not through the mouth; the soft palate explains this phenomenon by its conformation.

I have seen horses suffering with colics, return gases without being mixed with any other matters; in these cases the noise made was not *short* and *clear* as in cribbing, but was a weak and long noise, composed of successive sounds; a kind of borborygmus.

2d. *That cribbing was the result of an old organic lesion of the stomach or of the intestine.*

Refutation. Veterinarians know that to make a horse cease from cribbing it is often only necessary to approach him. We all know that change of place in the stable or change of manger, will often cause the animal stop, if not forever, often for several days.

Would these changes have the effect of curing an organic lesion of the stomach or intestine? Many horses which by cribbing excessively, had become thin and emaciated, had ceased cribbing when the objects upon which they took their *point d'appui*, were removed, and had then recovered their strength and their

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fat condition in a few weeks. . . . Where was the chronic disease of the stomach and of the intestine?

3d. *That cribbing was the symptom of a stomach or intestinal pneumatose produced by difficult digestion, that it was a mean to get rid of the gases which would otherwise produce meteorism.*

Refutation. The collar, that true carean, with which the throat of the poor cribber is compressed and by which the act of cribbing is often prevented; would it be a specific against the stomach or intestinal pneumatose? That collar, which prevents so completely eructation, if it prevented the *expulsion of gases*, would it not become the immediate cause of a fatal tympanitis? Fortunately it only prevents the ingurgitation of air.

Many horses, who do not crib in eating oats or hay, do it in eating straw only. Is it because the presence of straw in their mouth gives rise to gastric or intestinal pneumatose? Some animals crib when the straw is *tied up in a bundle*, but not when it is untied and loose. Would the fact of the straw being tied render the digestion difficult, and would untying it cure the trouble?

The proof of the aspiration of air in the act of cribbing can also be found in the fact that in the animal who swallows it, the tympanitis increases with the length of time during which the habit continues.

Conclusion. *Cribbing is a direct cause of the digestive troubles, of difficult digestion, of the gastric and intestinal pneumatoses and is not an effect of chronic gastritis and enteritis.* And then when the autopsy of a cribber shows its gastric and intestinal mucous membrane modified, this condition must be attributed to the *abnormal irritating and long-continued contact of the air swallowed, with organs which were not made to be exposed to atmospheric impressions.*

Experiments have been made to determine whether in cribbing, there was aspiration of the air or regurgitation of gases. To this purpose, pulverized substances, very light, were placed near the mouth of the cribber and these powders were seen inspired by the mouth at the moment of eructation. This experiment did not satisfy me. I have placed flour on the spot where the animal rested his mouth to crib, and have seen this substance inspired at the time

of eructation, but what remained on the manger was blown afterwards, and with much force, by the expired air.

VI.

Cribbing is a bad habit acquired by horses in the stable, as a consequence : 1st. of the bad disposition of the hay-racks and mangers ; 2d. of the insufficiency of the size of the ration ; 3d. of idleness and inactivity.

To well understand the mode of action of the first of these causes, let us look how the prehension of solid food is performed by horses.

Colin in his Physiology says : "The horse and the other solid-peds use their lips and incisives teeth both to take their food either at the hay-rack or the grass yet attached to the ground, or the oats and the other divided and pulverized substances. Their long, very movable and excessively sensible upper lip serves to gather the grass and slips of hay, and then the incisors take hold of it and pull it from its place."

The eminent professor has omitted to tell us *how*, by *what motion*, this action of pulling is done ; I will try to fill up the gap and explain the process.

When the animal is *at grass*, the lips and the incisor teeth are not always sufficient to tear the grass from the ground, as the teeth are not made to cut neatly and at once plants of a fibrous and resisting structure. In the same way *in the stable*, to pull off hay from the rack, or straw from the bundle, the action of the lips and teeth is not always enough.

1st. *At grass*, when the plant is resisting, the action of these organs failing, the animal executes a movement of elevation of the head. It is this motion from below upwards, produced by the levator and extensor muscles of the head, which comes to assist the deficient action of the lips and teeth in the prehension of the blades of grass.

The action is so much more evident and marked when the grass is tougher ; it is scarcely visible when the grass is short and tender. It is easily made evident and marked, if a tied bundle of clover, secured to the ground, is offered the animal to eat. •

I insist strongly, and with reason, on the movement of traction upwards, as it is a *rational movement*.

2d.—*In the Stable.*—While at grass and in his state of nature, the horse takes his food at the level in height of his feet, or at best up to his knees. In the stable, the food is placed in racks some distance above the level of the floor. In these racks, the food is almost always dry, and offers a resistance in proportion to the manner in which it may be tied up and to the openings between the bars of the rack, which may greatly vary.

To take hold of the food, then, the horse has to perform motions of traction from *above downwards*, by contracting the flexors of the head. These motions of traction downwards become then, the occasional cause of cribbing.

If the movements upward are natural in the prehension of food, those downward are unnatural in the same physiological act.

When a horse begins to crib, it is always by pulling his food from the rack, straw principally, which is the most difficult to take hold of.

Let us now examine a young horse, having a good appetite, hungry, and which has in his rack but a little straw. He takes hold of it, finds some difficulty after seizing it with the lips and teeth in bringing it in his mouth. To complete the prehension of his mouthful, he performs an energetic movement of traction downwards; with this movement all the flexor muscles of the head and neck, including the sterno hyoideus and thyroideus, enter into action; these last muscles depress the pharynx, hence the dilatation of this organ, the rarefaction of the air it contains, the rushing of the external air in the pharynx; the shock, the eructation, in one word, the cribbing, as I have demonstrated before.

VII.

Many young horses which never showed a disposition to crib when in the stable of the farmer who raised them, become cribbers when they are alone in a stable, especially if for some reason the *volume of their ration is reduced*.

It is known that farmers give their young horses pretty nearly all the hay and straw they will eat; this regime increases the

capacity of the stomach and the intestines, and gives the animal a large belly. The person who buys such a horse, to make of him either an elegant saddle horse or handsome coach horse, wants to reduce that unsymmetrical abdomen—and to do it reduces the ration of hay and of straw. At the farmer's the animal had 15 kilograms of hay and as much of straw daily; they are reduced to 5 kilograms—and the horse which at each meal before had 5 kilograms receives now only two kilograms, with which, with the straw and oats, he is to fill up the capacity of his stomach of 15 litres.

All that food taken will scarcely fill two-thirds of his stomach, and he will yet be hungry, as that terrible sensation ceases only, according to Mr. Colin, when the *stomach has received all it can contain*. This horse, whose stomach is incompletely full, who is hungry, and has nothing left in his manger or his rack, will begin to bite them, gnawing them; by powerful contractions of the flexor muscles of the neck and head he will try to tear and pull them to pieces; and in these contractions the pharynx will be depressed and the cribbing produced, as I have already demonstrated.

It is thus that healthy and strong horses, and big eaters, have become cribbers and formed the habit from no other cause than the insufficiency of the volume of their rations.

Nervous and well bred horses become cribbers by idleness: it seems that it is by tediousness, by impatience of the inactivity to which they are subjected, that they bite and gnaw the mangers, racks, stalls, ropes of the halters, etc.,; and it is always in making energetic tractions upon these objects, in contracting the flexor muscles of the head, that they depress the pharynx and succeed in cribbing.

VIII.

The horse which is a confirmed cribber, does not crib while at grass or when his food is placed in front of him on the ground. If he wished to do so he could not, for two reasons, 1st, because in that attitude the sterno hyoideus and thyroideus muscles are so relaxed that their maximum of contraction could not depress the

pharynx ; 2d, because, in this case, the cribber, to perform the act of prehension, is forced to move his head from *below upwards*, and that cribbing is only possible in movements of the head from *above downwards*.

A cribber with point d'appui, either in eating or after his meal, must have a place to take this d'appui at a certain height. From the experiments I have made it is proved that a horse of ordinary size, say 1 meter 58 centimeters, cannot crib, if the object upon which it can take his point d'appui, is placed at 50 centimetres from the ground—above this, ingurgitation is not possible.

Most mangers are placed at 1 meter 20 centimetres ; hay racks are put at least 1 meter 50 centimetres from the floor. This bad disposition excites the act of cribbing, as at that height, the head raised to that point, all the necessary conditions for cribbing exist—as in this position the prehension of food can take place only from downward motions.

Evidently, in such conditions, cribbing must develop itself sooner or later.

The *natural prehension* taking place only by movements of the head upwards, we may say that cribbing is the result of an *abnormal prehension*, in which the horse is obliged to make movements of the head downwards.

IX.

From the preceding experiments and observations it results : 1st, That the horse which cribs cannot do it if his food is placed in such situation that to take it he is obliged to move his head *upwards*, and if he has no place to take a point d'appui below 50 centimetres from the ground. 2nd, That it is in taking hold of his food in high placed racks, in executing movements from above downwards to secure it, that he becomes a cribber.

This being admitted, the true treatment, both preventive and curative, of this affection, is to have hay-racks and mangers placed at a distance from the ground not exceeding 50 centimetres.

To be Continued.

THROMBOSIS (CONTAINING PARASITES) OF THE GREAT MESENTERIC ARTERY.

From the introductory remarks of the highly interesting cases reported in the first article of the fourth volume of our professional organ, I infer that citations belonging to the sphere of the same category would not be objectionable. Therefore I take the liberty to communicate one of my earliest observations of an analogous nature.

The memorandum is dated September 30, 1857. I had no idea then of making any further use of it than to compare it at some future time with similar occurrences, for which I have been looking ever since in vain.

The subject was a nine-year-old brown mare, sixteen hands high, and in tolerably good condition. I was informed that during the five months the man owned the mare, she never refused her food until the morning she took sick, and the only strange symptom he ever noticed was that about a week previous, while hauling stone, she for a few minutes dragged her hind limbs in such a manner as though some spinal disease was in progress.

September 30—Find the animal in the stable lying on her chest, unwilling to rise, coat staring, temperature diminished over the whole body, Schneiderian membrane congested, pulse 70; heart-strokes can be felt on both sides of the chest, respiration heavier, but not accelerated; peristaltic action of the bowels sluggish, feces soft, defecation frequent, but in small quantities.

October 1—7 A. M., condition unchanged; in the evening apparently recovered. During the night the patient discharged considerable soft, undigested feces.

October 2—In the morning, when the owner appeared, the mare neighed lustily; water then was given her, which she drank freely. After eating about one-third of her food, she commenced looking back to her sides, lying down and rolling about; this uneasy spell passed off in a short time, and at noon she ate some food with apparent relish. At 4 P. M. the pains reappeared, attended with profuse perspiration; the dorsal position is now the preferred one. At 8 P. M. she began sitting on her

haunches. The borborygmus was inaudible sometimes for hours, then again would set in with encouraging alacrity, though only temporarily. The voiding of feces and urine ceased at 1 P.M. She is but slightly tympanitic. The peripheric temperature and sensibility sunk in a hopeless manner.

October 3—This morning the mare is reported better; an examination however, indicates the reverse. I advised the owner to take her to the woods, wherefrom he returned in a short time with the information that she died soon after reaching the place. During the animal's illness, she, at intervals, showed lameness of the left fore-leg.

Autopsy made two hours after death. The cadaver was slightly tympanitic, stomach healthy, small intestines appeared anaemic; the cæcum and colon somewhat engorged, contents of the whole alimentary tract of a semi-fluid consistence, the remainder of the abdominal organs apparently healthy. Not satisfied with the result, I continued my researches, and found the great mesenteric artery obliterated by coagulum, consisting of a fibrinous mass about two inches in diameter, and more than twice as long, containing in the centre two worms, of the thickness of a common sewing needle. One of them was a little longer and alive, with red head and tail, and the rest of the body almost translucent. This species of parasites is termed by Prof. Bollinger *sclerostomum equinum*. In my opinion it is the same entozoon described by Prof. Zurn as the larva of *strongylus armatus*.

Considering myself amply rewarded, I neglected to look for elongations or branches of this thrombus, which might have furnished a clue to an explanation as to the cause for the periodic lameness in the left fore-leg, with which she was affected during her illness. "Was it the result of the obliteration of said vessel?" If so, "how is suspension of circulation in the great mesenteric artery liable to impede locomotion in the anterior extremities?"

The dragging of the hind limbs which she exhibited for a few minutes, as mentioned above, goes to show that the embolism had a more extensive range than I detected.

Cincinnati, O.

J. C. MEYER, SR., V. S.

EDITORIAL

VETERINARY SCIENCE IN AMERICA.

In 1876, on the occasion of the festivities of the Centennial, the United States Veterinary Medical Association held its anniversary meeting in Philadelphia.

A number of papers were presented and read at the meeting, amongst which we had prepared one upon the history and progress of Veterinary Medicine in the United States.

This paper was found by Prof. Steele, F.R.C.V.S., &c., of sufficient interest, and, we dare say, of truth, to induce him to use it in the writing of an excellent article which was published in the *Veterinarian* in January of this year.

In the May number of the same journal appears a letter from Mr. R. Jennings, Jr. on the same topic, which we present to our readers, and in which we are said to have been "unjust, unfair and prejudiced," and that we have committed "errors and omissions" when we allowed this paper to be published.

Had the gentleman read our article he would have seen that we stated that "many points would be found deficient," and also "that to write such a history a much older resident of America would have been better qualified for the task"—a sufficient apology, we thought, for what did appear in our review of the subject. But the gentleman did not read it! We hope he will, however, and satisfy himself of the impropriety of the adjectives he so freely applies to us.

Mr. R. Jennings, Jr., says that before the time we came to the United States, the "rough road traveled by his (our) predecessors was made comparatively smooth, leaving him (ourselves) an easy victory."

To this we would answer that we have been nearly twenty years engaged in our special work, and that what little success we have attained we hesitate to call a victory; we are yet to learn who else attempted it before, and struggled through it without giving it up after the weakest attempt.

We are taken to task in reference to two points—the first is the establishment of veterinary colleges in the United States, the second in relation to the organization of the United States Veterinary Medical Association; both of which he wishes us to attribute to his father.

In our history, we gave credit to the organization of the "*Pennsylvania College of Veterinary Surgeons*" as having taken place in 1866, and not a word is said by us of the connection of Mr. McClure with that institution. It is true, Mr. Jennings tells us of the organization of the "*Veterinary College of Philadelphia*" in 1850. We were ignorant of this fact. But the reader will, by careful perusal, satisfy himself of the *hard smoothing work* done by that institution, which, chartered in 1850, took three years to organize, which organization failed by the resignation of two of its members; which was, however, reorganized in 1857 to see a second failure by a second resignation amongst its faculty; and the college remains, as we stated in our paper, without a building, and delivering lectures (if any are given) in the rooms of the Agricultural Society. We must, however, acknowledge our error in mentioning the name of the institution. How long did the father of the *Veterinary College of Philadelphia* constitute the entire faculty, after the resignation of Mr. Bowler in 1859-60, before he went out *traveling*, we cannot answer. We were again going to be unjust, for Mr. Rob. McClure was then appointed to fill the vacancy left by Mr. Bowler, *which connects him with the Philadelphia Veterinary College*.

In relation to the true Pennsylvania College of Veterinary Surgeons, now dead since 1870, we may have made some errors. We would be thankful to our friend Dr. Gadsden, who has been in Philadelphia for a number of years, if he would acquaint us with the running of that institution during its existence of four years.

Can the Veterinary College of Philadelphia, considering the manner in which it performed its work and not merely because it obtained its charter in 1850, be considered as the first one in the United States?

We say no! The first truly organized school with faculty, building, lecture-rooms, clinical department, hospital, dissecting-

room, was the New York College of Veterinary Surgeons; a fact which we stated in our paper, read before the United States Veterinary Medical Association.

At the said meeting many members from different parts of the country were present, and not one made any objection or found any misstatement when the paper was read and ordered to be printed; *not one to find it unjust, unfair or prejudicial!*

As to the second grievance brought to our door, the organization of the United States Veterinary Medical Association: Is Mr. Jennings, Sr., the father of it? Many of the members present at the first meeting of the organization are yet alive, and they can correct us if we are in error.

In our paper we gave credit to the Philadelphians for taking the initiative in the movement. By the letters which Mr. Jennings, Jr., publishes, we are shown that his father and Mr. Wisdom "were requested to correspond with members of the profession" on that point. Mr. Wisdom was an elderly gentleman, who, we doubt not, was very glad to give his colleague all the duties of the secretaryship, and for that reason all the letters which are printed in the *Veterinarian* are directed to the same person.

We believe that the minutes of the meetings of the United States Veterinary Medical Association will show who were the true starters of that organization, and we believe that the credit belongs just as well to any of the veterinarians of Pennsylvania, New Jersey and Delaware as it belongs to one man alone, as the article of Mr. Jennings, Jr., seems to intimate.

Our connecting Mr. Jennings' and McClure's names in relation to veterinary works does not mean that the books were written by both parties, but merely that they have both published works on veterinary medicine.

OBITUARY.

After a long illness, Doctor AUGUSTUS D. CARMAN, of Brooklyn, N. Y., died in his 26th year, on the 27th of April. His diploma was dated 1879.

PLEURO-PNEUMONIA.

EXTRACTS FROM THE REPORT OF DR. C. P. LYMAN TO THE COMMISSIONER OF AGRICULTURE.

Continued from page 88.

NEW JERSEY.

The following are the locations of some of the diseased herds in New Jersey at the time of my investigations in February:—

Atlantic County.—Benjamin Gibberson, Port Republic, herd of eleven head. This herd was quarantined October 29, and again on November 28, as chronic cases. Eight animals had been affected by the disease.

H. A. Johnson and William Ramsay, both of Port Republic. The herds belonging to these gentlemen were diseased and in quarantine.

Gloucester County.—Charler B. Leonard, of Paulsboro, has two farms, upon one of which he has a herd of twenty-two animals, six of which are suffering with the plague. He has twenty-eight animals on the homestead farm, only one of which has shown symptoms of the disease. Both herds are in quarantine.

Benjamin G. Lord, of Woodbury, herd of twenty-five head. June 13th six of these animals were suffering with the plague. October 27th there were twenty-one of these animals sick. On November 25th the same number were suffering with the disease, and were all in quarantine. Of the first lot of twenty-five animals, six were attacked and three died. He then bought four or five fresh animals. These remained in good health for five months and twelve days, but of the original animals, twenty-one had suffered with the contagion.

Camden County.—An occasional case of contagious pleuro-pneumonia had been found here, but no great amount of the disease had ever existed. A most thorough system of inspection of cattle coming from Philadelphia has been established here, and its rigid enforcement has undoubtedly been of great service

in preventing the importation and spread of the contagion. From August 28 to December 15, 217 animals known to have been exposed to infection were returned to Philadelphia. Forty-one head of these were suffering with plain and unmistakable symptoms of the malady.

Burlington County.—Howard Stakes, West Hampton, herd of eleven head. Quarantined June 20, but does not obey quarantine regulations.

Job Evan, Mount Holly. Herd quarantined July 11. One acute case.

D. Mulloney, Recklesstown. Lost one animal on January 20.

William Murray, Jacksonville, herd of fourteen head. There have been four acute cases in this herd, and two animals have died. He will probably lose others. The herd was quarantined July 11.

Ocean County.—E. H. Jones, Forked River, herd of twenty-nine head. There have been twenty-seven acute cases in his herd. Six animals were killed on October 2, and on the 15th of the same month the balance were slaughtered. The infection in this herd was brought in some calves purchased in Fortieth street, New York city. From October, 1878, to October, 1879, Mr. Jones lost thirty-two animals by this disease.

At the same place as the above, Moses Street has one animal, Captain Wilson three, and James Holmer twenty-three, all of which are infected and quarantined.

Mercer County.—G. E. Neunamaker, Pennington. On November 17th, three of his animals were suspected. On the 20th of the same month two acute cases had developed, and the herd was quarantined. One animal was slaughtered on January 17th. Two animals recovered and are still on the place.

William Walton, Dutch Neck, herd of thirty-two head. On May 5th one acute case appeared. On May 15th the animal was very sick, and as other cases were developing, the herd was quarantined. The owner did not believe his animals were affected with the plague, and failed to observe the quarantine regulations until one of the animals was killed in order to prove the fact. The herd becoming seriously affected, Mr. Walton sold, on

October 29th, all his animals to a butcher. This herd was infected by a cow purchased in New York. She calved, and her offspring at five weeks old showed the well marked lesions of contagious pleuro-pneumonia.

Monmouth County.—D. C. Robinson, West Freehold. One cow died of the plague on May 13. On the 9th of the same month another cow showed symptoms of the disease, and the herd was quarantined. On June 11th three more animals were sick, one of which has since died, and a second one recovered. The quarantine is continued.

A. D. Voorhis, Adams Station, herd of five head. One of the animals was found sick on October 13, and the herd was quarantined. On the 16th of the same month another animal showed symptoms of disease. One of the affected animals was killed. On November 19, a third animal was taken sick. The herd is still in quarantine.

Pliny Parks, who resides on an adjoining farm, had a herd of eight animals infected. One was killed and the remainder quarantined on October 16.

D. W. Watsons, Perth Amboy, herd of thirteen head. His herd was quarantined March 29, 1879. October 13, nearly six months after, he still had eleven head. On February 5, 1880, having added to his herd, he had thirteen animals, three of which were sick, and the others reported as well (?). The three sick animals were quarantined, and the remainder set at large.

Isaac Morris, Metuchen, herd of fourteen head. The first case of the plague was discovered in this herd on May 22. The animal was taken to the butcher and killed, and the herd quarantined, which is still continued.

Hunterdon County.—Joseph Exton, Clinton, herd of fifty-one head. On June 9, eighteen of the animals were found suffering with the disease and were quarantined. The quarantine is still continued.

Morris County.—D. Frank Carl, Sterling, herd of thirteen head. On March 26, eleven head were sick. On February 20, but five animals remained, one of these showing old lesions. They are in quarantine.

Benjamin Runion, Millington, herd of twenty head, twelve of which were sick on June 13, when the animals were quarantined. Two animals were killed, and on the 26th of June, eight animals were sick out of the eighteen remaining. Two new cases had occurred, but the others were improving. The herd is still in quarantine.

Mary Smith, Chambers street, Newark, herd of five head. On October 24 one animal was reported sick. On the 28th of the same month a second one was attacked, and two were killed. On January 14 the others were reported as "recovered," but were still quarantined.

Alice Kennedy, Roseville, had one animal affected with the plague, which was killed August 14.

Union County.—C. E. Winans, Salem, herd of nine head. Had lost two animals up to August 5. The remainder were sick and in quarantine.

Louis E. Meeker, Salem, herd of thirteen head. Five animals were sick on August 1, when the herd was quarantined. On January 2, having purchased another animal, he had fourteen head. Three of these were chronic cases, and were ordered quarantined for thirty days longer.

J. O'Callighan, Salem, on August 25 had a herd of nine head, with but one animal sick. Up to November 12 he had lost five animals, and had but four left. On January 20 he was visited by the State Inspector, but refused to drive his cattle in from the field for examination. The officer, on threats of personal violence, ordered him to keep up the quarantine, and left without making the examination.

E. A. Bloomfield, Salem, herd of four head, one sick; quarantined August 26. Had one chronic case on January 1; quarantine continued.

F. Saltzman, Roselle, herd of three head; two sick; quarantined September 3. On January 20 one animal was sick, and the herd was still in quarantine.

Bergen County.—C. McMichael, Leonia, herd of twenty-one head; five sick; quarantined April 1. On July 11 had two animals sick, and on January 21 had but five animals left, two of

twelve of which were sick ; quarantine continued.

Christian Freund, Closter, herd of ten head ; five sick ; quarantined November 11. The same report of this herd was made on November 19 ; it is still in quarantine.

Hudson County.—The disease exists in the following localities :—

Stables Nos. 133 and 144 Essex street, Jersey City.

Jersey City Heights.—Mary Mullin, No. 106 Thorn street ; J. Lewis, corner Hutton and Sherman streets ; J. Platz, No. 899 Montgomery street ; J. Gurrey, Hopkins street ; Martin Stanton, Hopkins street ; George Reed, No. 87 Germania avenue ; J. Leddy, Nelson and Charles streets ; J. Ryan, No. 25 Laidlaw avenue ; Jonathan Meyer, No. 22 Gardner street ; John Bosch, Congress and Hancock streets. These localities are all in quarantine.

Greenville.—B. O'Neil, Brittain avenue ; William Shaw, opposite cemetery ; Mrs. Coreoran. All quarantined.

Hoboken.—Benjamin Engle, No. 200 Newark avenue ; John Torpey, No. 172 Grand street ; V. Cohen, old Small-Pox Hospital. (Mr. Cohen, having diseased animals, desired a permit to put a fresh cow in his stable. He was refused, but he stated to the officers that he should put her in anyway. This he did, and I afterward saw this cow in his stable suffering with the disease in its acute stage) Michael Reynolds, No. 165 Grand street.

West Hoboken.—J. Claude, Cortlandt street ; Harrit Aaron, Newark street ; H. M. Nass, Hallingen ; Mrs. Schmidt, Hackensack plank road ; B. Benjamin, Cusset street ; Kuntzle, Blume street ; Mrs. Schlooler, Blume street ; Ernest Weiss, Demot street, and Oldmeyer, Boulevards.

Secaucus.—Latenstein, county road ; H. Fisher, Secaucus road ; Loeffle, race course ; Bryan Smith, race course ; N. Wohlker, race course ; H. Block, North Bergen.

DELAWARE.

The only information I have as to the prevalence of the disease in Delaware I received in the course of a conversation with Mr. George G. Lobdell, president of the Wilmington Car Wheel

Company. His farm is located in New Castle Hundred, about two miles from Wilmington. In 1858 he had a valuable herd of animals. During this year contagious pleuro-pneumonia broke out among some cattle on a farm about three miles from his place. Fearing the infection of his herd, he commenced to sell off his cattle as he could find purchasers, but before this was accomplished, and perhaps within four months, it reached his farm, and by spring he had but one animal left. For two years after this he was without cattle, but at this time he commenced to stock his farm again. About six years ago the disease was introduced into a herd kept on a farm about two miles from his place. His own cattle remained exempt until about two years ago, when they were again infected. Since then he has been using the fumes of burning sulphur, and has had no fatal cases. Mr. Lobdell informed me that some sort of a law had been passed by the State looking to a suppression of the disease, and that three Commissioners had been appointed by the Governor to superintend and enforce its provisions.

MARYLAND.

Although it has long been known in a general way that contagious pleuro-pneumonia existed among the cattle of this State, no effort on the part of the authorities has ever been made to ascertain with any exactness the localities of the diseased herds. On the 8th of March I proceeded to Baltimore, where I at once called upon Mr. Wm. B. Sands, editor of the *American Farmer*, a gentleman who had greatly interested himself in this matter, and who gave me all the information in his possession as to the localities and extent of the plague in the State, as well as kindly furnishing me with letters of introduction to the officers of the different agricultural societies throughout the State. On the 9th of March I visited Hagerstown, the county seat of Washington county, where on the next morning I called upon P. A. Witner, Esq., secretary of the County Agricultural Society. He said he did not believe there was any disease in the county; that upon the day before there had been a meeting of the Board of Agriculture, at which there had been a good representation from all

the different sections. Those present agreed that they had never known or heard of a case of lung plague in any part of the county.

I was next introduced to Mr. J. B. Bansman, a cattle dealer of this place. In the pursuit of his business he had been all over the county repeatedly, but had never known of a case of the disease. The drift of cattle in this place was entirely from Western Virginia through to Baltimore—never, so far as he knew, from Baltimore here. In his trade he feels very much the evils of the English embargo. It makes a difference to him of at least \$10 per head in the price of his cattle. I then saw Dr. H. J. Cossens, an English veterinary surgeon, who has been located here for the past fifteen years, and whose practice extends over the entire county. He had a considerable experience with the lung plague in England, but had never seen but one case in this country; that was many years ago in Virginia. He is sure there is none in this county, nor has there ever been. Several other gentlemen from different localities were seen, but always with the same result. One farmer had a cow, which he had recently bought, that was coughing and not doing well. I visited her and found her suffering from tuberculosis. In the afternoon I proceeded to Frederick City, the county seat of Frederick County. Here, upon the 11th of March, I called upon Mr. J. W. Baughman, Secretary to the local Agricultural Society. He did not know of any diseased animals, but took me out to the Court House, where we saw and questioned a number of gentlemen from different parts of the county. None of them knew of any cases of this disease; they were very sure that had there been any unusual sickness they would have known of it.

I next saw Dr. P. R. Courtenay, an English veterinary surgeon. He had been here but a comparatively short time and had heard of nothing that caused him to think that there was any of this disease in the county. He kindly offered to bear the matter in mind, and if any cases of the disease came to his knowledge, he would let me know at once. Here, as in Washington County, the whole drift of cattle is from west to east. In the afternoon I went to Westminster, the county seat of Carroll County, and

called upon Colonel W. A. McKellip, President of the County Agricultural Society. He was sure there was no disease of the kind in the county, but he said it was quite a common thing at certain seasons of the year for cattle to be brought here from Baltimore. This I regarded as a very suspicious circumstance, and so asked for an introduction to some cattle dealers in town. This was kindly granted, and I proceeded to call upon Mr. Edward Lynch. He said: "Farmers hereabout generally make milk for the Baltimore market, and procure their cows from among themselves; but from the time that grass comes up until late in the fall of the year some of them are in the habit of feeding cattle; that the cattle for this purpose are generally bought at the "Scales" in Baltimore; that in this way last fall Mr. Samuel Cover, of Silver Run, this county, procured some stock which, after having been on his place for a short time, developed disease of some sort; some died, and some that were sick, got well. Also, a Mr. Beacham, of Westminster, had had trouble of a similar nature for some time past. In a general way, he knew that the farmers hereabout were somewhat frightened about contagious pleuro-pneumonia. On March 12, I drove to the farm of Mr. Samuel Cover, above referred to, at Silver Run, and found three cases of chronic contagious pleuro-pneumonia. This gentleman stated that he had got the disease last fall through some steers that came from Southwestern Virginia, but which had stopped at the Baltimore stock yards for some little time, at which place he had bought them. Some four or five weeks after he got them, the disease broke out among them. He had at the time some eighty head of neat stock. Of these fifteen were sick. When the disease first showed itself, he put all the sick animals in a building by themselves, and had all his stables thoroughly disinfected. This was kept up all the time, and the places repeatedly whitewashed. In all, four animals died—two of them the Baltimore steers; the other two were cows which he had had for some time. Mr. Cover further says that now, when he gets cattle, he always puts them by themselves in a building entirely away from his regular cow stables, and hopes in this way to avoid any further outbreaks among his herds.

Returning to Baltimore on March 7 in company with Dr. Daniel Le May, a veterinary surgeon, I visited a herd of milch cows kept in a dairy in Woodbury, near Baltimore. Here we found one acute and two chronic cases of the plague. The man in charge said that he had got through with the disease, from which he had suffered greatly some two months ago, by selling out all his sick animals. From here we went to another large dairy in the same neighborhood. The gentlemanly owner here informed us that he had had none of the disease for some time; that his plan was to buy often and sell often. In this way he found he could keep up his milking stock and keep rid of disease. From here we visited a near neighbor living on the direct road to the city. In answer to questions this man said that he did not know if his neighbor (the one from whom we had just come) called it having the disease or not, but that he drove many a sick one past his house on his way to the Baltimore market. He (our present informer) was free to say that he followed the same practice himself, and had done so ever since he lost his first eight animals. He supposed this was not right, but his neighbors did it, and so he did. Summer was invariably the worst time thereabout. The next place visited was about two miles distant and on a different road. The dairyman here had suffered greatly in the past, but thought that now by selling the sick ones he had nearly rid himself of the plague.

MARCH 18.—We drove in several directions around the city and found the disease, or its effects, in all the herds except one that we visited.

MARCH 19.—To-day we examined a number of the cow stables in the city itself, in which many chronic and a few acute cases were found.

MARCH 22.—I went to Harford County, where the disease was reported as existing in a number of different directions. However, we concluded to visit the farm of Senator George A. Williams, whose herd of fine Alderneys have been suffering more or less from the scourge for the past two years. Here among several chronic cases was one that, although he had been sick for some time, was making no progress toward a good recov-

ery. This animal the overseer consented to let us kill. The autopsy showed, well marked, the lesions of the disease. The infection here, as with all the other outbreaks hereabouts, came from Baltimore. At this point further investigations were given up for the present, and it still remains, in order to properly finish this report, to make an examination of the remainder of this State, the District of Columbia and Virginia, in all of which places it is believed that contagious pleuro pneumonia of cattle exists to a greater or less extent.

WHAT THE INVESTIGATION SHOWS.

As a result of my investigations thus far I find this ruinous foreign plague actually existing among cattle in the following States:—

CONNECTICUT.—In Fairfax County.

NEW YORK.—In New York, Westchester, Putnam, Kings and Queens Counties.

NEW JERSEY.—In Atlantic, Gloucester, Camden, Burlington, Ocean, Mercer, Monmouth, Middlesex, Hunterdon, Morris, Essex, Union, Bergen and Hudson Counties.

PENNSYLVANIA.—In Philadelphia, Chester, Montgomery, Bucks, Lehigh, Cumberland, York, Delaware, Lancaster and Adams Counties.

MARYLAND.—In Carroll, Baltimore, Harford and Cecil Counties. The middle and southwestern portions of this State have not yet been visited.

No examination has as yet been made in the District of Columbia, or of the infected territory of Virginia; but as the plague prevailed quite extensively in both of these localities last season, it will no doubt be found still in existence when the investigation takes place.

EXTRACTS FROM FOREIGN JOURNALS.

VETERINARY SCIENCE IN AMERICA.

To the Editors of the Veterinarian.

DEAR SIRS,—In the January number of the *Veterinarian* for 1880 I noticed a paper, contributed by John H. Steel, M. R. C. V. S., F. Z. S., &c., which finished up as follows:—"If any American reader notes errors let him be assured that we shall be anxious to correct our statements when proven to be in the wrong." Thanks for the privilege. That the writer has been misled by the unjust, unfair, and prejudicial statements of the editor of the *American Veterinary Review* is quite apparent. That errors and omissions occur will readily be detected by the impartial "American reader." I very willingly accord all due credit to Prof. A. Lautard for his praiseworthy efforts in the advancement of veterinary science in this country. It should be recollected, however, that at the time he came to the United States the rough road travelled by his predecessors was made comparatively smooth, leaving him an easy victory. That I may present the subject fairly and impartially to the readers of the *Veterinarian*, permit me to go back to the early history of veterinary advancement in the City of Philadelphia. My father, Robert Jennings, was the first to publicly advocate the cause of veterinary science in this country. He was not a graduated veterinary surgeon, but had read medicine for several years, and being well posted in comparative anatomy, commenced in the winter of 1846 a course of veterinary lectures to a class of medical students in the City of Philadelphia, which was continued during the sessions of the medical colleges for several years. In 1850 he conceived the idea of organizing a veterinary college. He made known his plans to Austin Miller, M.R. C. V. S., and John Scott, M. R. C. V. S., (the only graduated V. S. in the city,) both of whom regarded the movement as premature, giving it the cold shoulder. He now laid his scheme before Prof. Wm. Gibson, of the Pennsylvania Medical University, and Prof. James Bryan, of the Philadelphia Medical College, both of

whom not only encouraged the measure, but personally solicited and obtained the names of the following prominent citizens of Pennsylvania to a petition asking the State Legislature for an Act of Incorporation for the Veterinary College of Philadelphia:—Gen. George Cadwalader, Wm. Gibson, M. D., John Philips, M. D., Alfred L. Elwyn, M. D., James Bryan, M. D., Hon. Frederick Watts, Gen. George McKeim, James Gowan, Hon. Geo. W. Woodward, Stetchley Morton, Alonzo Potter, D. D., and L. L. Ward, which charter was granted without delay, and duly signed as follows:—"John S. Rhey, *Speaker of the House of Representatives*, John H. Walker, *Speaker of the Senate*. Approved the Fifteenth day of April, A. D., one thousand eight hundred and fifty-two, Wm. Bigler, *Governor of the State of Pennsylvania*." This, the first veterinary college chartered in America, the date fully proves. Robert Jennings having been the recipient of an honorary diploma from the board of directors, was placed at the head of the new institution. Early in 1853 he presented the following as the faculty of the college:—W. W. Fraley, Prof. of *Materia Medica* and *Therapeutics*, T. J. Corbyn, Prof. of *Pathology* and *Surgery*, John Scott, M. R. C. V. S., Prof. of *Practice of Medicine* with reference to all domestic animals, Geo. W. Bowler, Prof. of *Medical Chemistry* and *Pharmacy*, Robt. Jennings, Prof. of *Anatomy*, *Physiology*, and *Operative Surgery*. Negotiations were entered into for the building of a veterinary college, the plan for which had been prepared by an architect, Mr. John Notman, a cousin of my father's. While these negotiations were pending, Drs. Corbyn, Fraley, and Scott tendered their resignations as members of the faculty. This was a stunning blow to the new enterprise, and for the time stopped further progress. This blow, severe as it was, did not discourage my father. He now directed his efforts in harmonizing the graduated and non-graduated veterinary surgeons, calling a meeting of such at his office, April 5th, 1854, urging the formation of a veterinary association for mutual improvement, T. J. Corbyn, W. W. Fraley, G. W. Bowler, M. Roberts, John Scott, Robt. Jennings, A. Tegtmeier and R. Evans being present, Evans and Scott being the only graduated surgeons. After discussing the merits of the question,

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it was resolved to meet at the same place on the evening of May 7th, for the purpose of permanent organization. At the appointed time there were no absentees. Professors Wm. Gibson and James Bryan were present as patrons of the new society, to be known as the American Veterinary Association. The meeting was called to order by Prof. Bryan taking the chair, and Mr. Roberts acting as secretary, when the following officers were elected :—President, T. J. Corbyn ; Vice-Presidents, James Bryan, M. D., and W. W. Fraley ; Secretary, M. Roberts ; Corresponding Secretary, John Scott ; Treasurer, R. Jennings ; Librarian, A. Tegtmeier, The objects: the cultivation of fraternal feelings among veterinary practitioners and the elevation of veterinary science. Ere the infant was six months old it was recognized by the Pennsylvania State Agricultural Society awarding it a silver medal for its fine display of anatomical and pathological specimens at the State Fair, September 29th, 1854, an engraving of which I send you. Notice of this organization will be found in the first volume of the *American Veterinary Journal*, published in Boston in 1855, p. 242. In the same volume, p. 341, Dr. C. M. Wood, of Boston, says : "I noticed an article on p. 242 by Mr. Jennings, V.S. I subscribe to most of the opinions and views expressed by Dr. J., and unite with him in the satisfaction he manifests for the recent progress of veterinary science in this country." He says further, p. 342 : "Dr. Jennings, the writer of the paper named at the head of this article, has done much towards dispersing the popular delusion in regard to the treatment of our domestic animals." Again (same page) ; "We rejoice to find by Dr. R. Jennings' paper that a spirit of emulation animates all parts of our country at this time in regard to this subject. That in the great State of New York efforts are making to establish a veterinary college. In Philadelphia there has been formed an 'American Veterinary Association,' which is already distinguished. Boston is ahead of New York at the present, but that giant city has only to will it and she surpasses all others." In the fall of 1854 my father was called to Cleveland to fill the veterinary chair in the State Agricultural College of Ohio, which position he held until the suspension of the college in the spring of 1857, when he returned to

Philadelphia again to engage in the interest of the college movement. Shortly after his return he presented to the board of directors the following faculty:—W. W. Fraley, Prof. of Materia Medica and Therapeutics; J. J. Corbyn, Prof. of Pathology, Surgery, and Practice of Medicine, in reference to all domestic animals; G. W. Bowler, Prof. of Medical Chemistry and Pharmacy; R. Jennings, Prof. of Anatomy, Physiology, and Operative Surgery; which was accepted. A building was rented at the corner of Sixth and Master Streets, fitted up with a spacious museum, in which was deposited nearly 2000 specimens, among which was an articulated skeleton of a horse, a pony, a mule, a cow, a hog, and a dog, a lecture room, library, laboratory, dissecting room, and infirmary, which were thrown open to the public on Tuesday evening of each week, at which time free lectures were delivered in the lecture room during the winter months. Free clinics were held at the infirmary every Wednesday and Saturday, from November 1st to March 1st. Unfortunately for the institution, Drs. Fraley and Corbyn resigned from the faculty before the first course of lectures were over; my father and Dr. Bowler, however, continued the course to the end, delivering lectures which should have been done by others. There were no fees attached to these positions, the current expenses being paid by the faculty and trustees. The following year an appeal was made to the Philadelphia Agricultural Society, which was referred to the executive committee, who at the following meeting of the society made the following report:—"That they had visited the museum and library of the Veterinary College and were surprised to find it so valuable and interesting. They were so favorably impressed that they ceased to doubt the propriety of the application," and therefore offered the following resolution:—"That the use of the rooms of the Agricultural Society be granted to the Veterinary College of Philadelphia for holding their lectures the coming winter." Dr. A. L. Elwyn seconded the resolution, and spoke earnestly in favor of inviting the faculty of the college to deliver their "course of lectures upon horsemanship, under the auspices of this Society," which received the unanimous vote of the Society. Dr. Bowler resigned after

the season of 1859-60 ended, returning to Cincinnati, where he left a lucrative practice to assist in this worthy enterprise. Robt. McClure was then appointed to fill the vacancy. In 1860 the following letter was received from the Veterinary College of Alfort, France, addressed to my father, which I have translated :

IMPERIAL VETERINARY SCHOOL OF ALFORT,
ALFORT, MARCH 7th, 1860.

DEAR SIR AND BROTHER,—My colleagues, the Professors of the School of Alfort, and I are very thankful to you for the honor that you are well pleased to do us in proposing us to be members of the Veterinary College of Philadelphia.

Therefore it is with pleasure that I send you, as you wish it, my name, giving the names also of the five professors, my colleagues, who are sending to you and to your honorable brothers their best respects and most sincere thanks.

Please accept, dear sir and brother, the expression of my own gratitude and of my most distinguished feelings.

(Signed)

ENG. RENAULT,

Director of the School of Alfort.

Messrs. Renault, Eng.	Thos. Eli.	Director.
Delafond, Henry Mam.	On.	Professor.
Bouley, Henry Marie.	"	"
Magne, Jean Henry.	"	"
Goubaux, Arm. Chas.	"	"
Sannier, Jos.	"	"

The college enjoyed the privileges extended by the Philadelphia Agricultural Society until 1866, when it suspended further operations, retiring from active service without a stain upon its character, the graduates of which hold legal diplomas, which are protected by law, as are those legally issued by other medical institutions. My father was the principal of the college from its commencement to the end, in which no irregularities were known, and to say: "Prof. McClure, M.D., V.S., who was the Veterinary College of Philadelphia, as the Officers and Prof. of the School by the authority vested in us by the sovereign power of the State of Pennsylvania confer the degree of veterinary medicine and surgery." Unfortunately he appended to the diploma announcing

this a signature not his own, and so experienced the sovereignty of his state under the form of a visit from a constable, and resulting in incarceration." The impartial reader will fail to recognize the above statement as true, when it bears upon its face the fact that "incarceration" was not the result of issuing bogus diplomas, but from the fact of one of the officers of the college having his name upon the worthless sheet without his having put it there, upon which the conviction took place, proving the charge as above, that he, "McClure, was the Veterinary College of Philadelphia," false, if not malicious. At the time these irregularities occurred the college doors had been closed ten years, therefore such statements are not only unjust, but grossly untrue. The name of A. L. Elwyn, M.D., was upon all legal diplomas issued by the college, as was also my father's, but his name did not appear upon the worthless sheets, neither was the seal of the college upon them, but instead a seal purporting to be of the Merchant's Veterinary College, an institution unknown to the veterinary profession. The above facts Prof. Liautard ought to have known, and not unjustly stigmatize the graduates of a college laboring under difficulties which had been removed previous to his coming to the United States. The first effort to establish a veterinary college in the City of New York, though backed by many and energetic professors, Capt. Rolston, and Dr. John Busteed proves this fact.

"Philadelphia has an inevitable notoriety in veterinary history in connection with the 'bogus degrees,' the fame of which, extending to this side of the Atlantic, has rendered us suspicious of qualifications." This conclusion appears more in the form of gossip or malice than of fact. Had the writer connected the 'bogus' reputation with human medicine he would have been correct. It was from this source, and not the veterinary, that Philadelphia became so notorious. The proof is given as follows in the *Philadelphia Record* :—"There is a badge of fraud in the very selection of the name of the bogus diploma factory recently exposed in these columns. It is so closely similar to that of the University of Pennsylvania, known and honored throughout the world, as to be easily confounded with it in the minds of the

unwary. The title of a fraudulent institution now commanding so considerable a degree of public attention was probably adopted with a deliberate purpose of deception. Like colorable imitation of trade marks and copyrights, it is a manifest counterfeit. The University of Pennsylvania is located in Philadelphia, and it annually graduates a large number of physicians. The 'Philadelphia University of Medicine' might easily pass for it at a distance from the city, and a degree given by this miserable make-believe concern might readily be mistaken for the *imprimatur* of what is recognized as one of the foremost of the great medical schools of the United States. Evidently the main object of this swindle, apart from the pecuniary purpose it subserves to those who run it, is to supply credentials to intending quacks, by which these villainous cheats may be helped to impose upon the public. The wickedness of such a fraud it is not needful to enlarge upon. The injury done to properly instructed and reputable practitioners of the healing art and the disgrace brought upon the fair fame of this city by its existence here are sufficiently bad results; but worse than these is the sending forth to work havoc upon the community at large of licensed murderers, whose pills and powders are potent only to kill such patients as may fall into their hands. A sad feature of this discreditable business is the connection with it of several ministers of the Gospel. Some of these perhaps amenable rather to the charge of thoughtlessness and indiscretion than of deliberate and conscious criminality. The facility with which names of the highest respectability are obtained as 'trustees,' 'visitors,' &c., of unworthy institutions and enterprises of a questionable character has become a great abuse. It would be a point gained if the easy-going gentlemen who lend their credit to these improper uses could be made to realize their responsibility, and an occasional recoil upon them of their good-natured folly is not altogether to be regretted. The ecclesiastical authority to which the clergymen alluded to are answerable has already taken steps towards an investigation of their connection with the counterfeit 'degree' mill. There is no reason to suspect that there will be any whitewashing in the case. Such of the persons implicated as are found to have a guilty knowledge of the

fraud will, no doubt, be duly punished." Is the above evidence sufficient to prove the error made in placing the "bogus diploma" business at the closed doors of the veterinary schools of Philadelphia?

The Pennsylvania College of Veterinary Surgeons, chartered in 1866 to take the place of the old school, was in the interest of and under the exclusive control of veterinary surgeons. The name of McClure does not appear among the corporators, neither will it be found associated with the faculty of the college, as you will see by the announcement and a copy of the charter, which I send you. These facts should prove his unpopularity among the veterinary profession in the City of Philadelphia. This institution fitted up a hall at No. 256 North Fifth Street, where two winter courses of lectures were delivered by the faculty. The finances of the college being in a healthy condition, it was decided to fit up a building better adapted to the purposes of a veterinary college. A building was rented and fitted up at the corner of Sixth Street and Columbia Avenue, which exhausted the treasury, compelling a direct tax upon each individual member. Two courses of lectures were delivered in this building, when, to save expense, the doors were closed in 1870, since which time quarterly meetings have been held in Diligent Hall. No effort as yet has been made to reorganize the college. In connection with this college the writer says: "In 1866 the Pennsylvania College of Veterinary Surgeons was granted a charter. It announced six officers, among them Isaiah Michener, one of the leading men of his State. It had no buildings, gave few, if any lectures; we may, therefore, conclude all Pennsylvania veterinary lectures as worthless." To refute such slanderous statements I have only to say that the veterinary colleges of Philadelphia held their annual commencements in public; the exercises, together with the names of the graduating classes, were regularly reported in all the daily papers in Philadelphia, as are those of other legitimate medical colleges. If such evidence is not sufficient to wipe out the infamous charges made by the enemies of the Philadelphia veterinary schools, I can furnish recorded evidence from other sources, which are too voluminous to offer at this time. No charge was ever made in

the City of Philadelphia against either of these institutions, the charge being wholly of an individual character against McClure. From these facts, which we assert to be true in every particular, the impartial reader will readily acknowledge the injustice done these schools, but more particularly to their graduates. The first or January number of the *American Veterinary Review* I did not see, or I would have answered the calumny at once.

In the list of American veterinary works mentioned by the editor of the *American Veterinary Review* I notice "works by Jennings and McClure." Now, I do not wish to charge Prof. Liautard with maliciously associating these names, but rather attribute it to want of information upon the subject. My father's works, 'The Horse and his Diseases,' published in 1860, 'Cattle and their Diseases,' in 1862, 'Sheep, Swine, and Poultry,' in 1863, and 'Horse Training made Easy,' in 1865, have no other name associated with them, nor is my father's name associated in any manner with any of McClure's publications. The works themselves prove the assertion. A review of my father's first work, by Prof. John Gamgee, will be found in vol. iii of the *Edinburgh Veterinary Review*, 1861; in which he says: "The above work favorably contrasts with other American publications on veterinary science. It indicates care in preparation and knowledge on many subjects connected with veterinary science. It is not quite up to the day when compared with many European works, and on some subjects remarkable deficiencies are observed." It is quite as remarkable that Prof. Gamgee should expect an humble author in a new country, where veterinary colleges hardly had a foothold, to compare with European authors, who have the advantage of more than half a century. He finishes his review as follows:—"We repeat that, on the whole, Mr. Jennings has proved in advance of his countrymen." Considering that Prof. Gamgee is one of the most severe critics known to the world, I regard it as very complimentary to my father. The United States Veterinary Medical Association was also planned and organized through the efforts of my father, proof of which is at your own door in an article that appeared in the *North American and United States Gazette of Philadelphia*, March 5th, 1863, and

copied in the *Edinburgh Veterinary Review* of 1863, page 253. As the article is a long one, we simply make one or two quotations. It reads as follows :—"The faculty and graduates at the commencement of the Philadelphia Veterinary College met afterwards at the Wetherill House to partake of a collation and indulge in social conversation. Though the subject was 'Horseology,' it was full of interest. The college is the first in this country; its faculty are men of superior intelligence—Robert Jennings, Robert McClure, Charles M. Wood, and A. S. Copeman. For this reason the Agricultural Society of Philadelphia recognized and encouraged the institution from its inception." An error occurs in the above regarding Prof. Woods and Copeman. At the time the college was negotiating with these gentlemen to place their names with the faculty, their decision not yet having been received, is where the mistake has been made. Containing: "Mr. Jennings suggested that this college, with its graduates during the last five years, should establish a national veterinary association, and ultimately establish a veterinary journal." Thus recording the facts in advance of its organization. Dr. C. M. Wood writes :

BOSTON, June 30th, 1859.

FRIEND JENNINGS,—Yours of the 11th of April, unanswered, is now before me. As to the "National Association," I fully agree with you, and both myself and friends here will hold ourselves in readiness to attend a meeting in New York City, for the purpose of such an organization, at any time that will best suit the convenience of parties desirous to unite with us in the cause. Perhaps you had better consult with your friends on the subject and inform us of their views, either Copeman or myself, and we will attend to it in our parts of this union. "Union," did I say? Yes, that is just what we want. I remain, with respect,

Yours truly,

CHAS. M. WOOD.

BOSTON, May 14th, 1863.

DR. JENNINGS,

(Four years later.)

DEAR SIR,—Your letter of May 2d has come to hand, and reminds me of a previous one which has been accidentally laid

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aside and forgotten. I am aware of the necessity of co-operation of all the veterinary practitioners to give strength and efficiency to their order, but permit me to say that I beg to be informed as to what are the qualifications required in such as may form the proposed convention. There are many persons who have taken up the practice of veterinary medicine and surgery who have had no proper instruction in these subjects, and are entirely ignorant of the principles on which they are founded. They have assumed the title and duties of professional men only for the name and living may be received from it. Now, my dear sir, these are such men as I do not desire to associate with. I do not say this to depreciate your efforts in the cause of veterinary medicine and surgical science, but there are such *men* as I have described, and you know there are. At a meeting of our vets. here last evening it was voted for several to come. But we must wait your reply to this for information.

I remain, friend Jennings,

Yours truly,

CHAS. M. WOOD.

OYSTER BAY, LONG ISLAND, May 13th, 1863.

FRIEND JENNINGS,—I have just returned from New York. I called upon Chas. Stetson, Esq., of Astor House, and communicated to him our proposed plans for the National Convention to be held on the 9th June. He is a great admirer of the profession, and is willing to lend us all the assistance that may lay in his power. He offered me gratuitously the use of the large parlor, to accommodate seventy-five or one hundred gentlemen. I now submit his kind offer to you. I called upon Dr. Busteed. He thinks well of this. To give the thing tone and respectability, we must go to a respectable place, and the Astor House has a wide-spread reputation as such. Bring all the vets. along; do not let one of them back out. Answer by return mail, and give me your views, but do not have the call published until I make the arrangements with Mr. Stetson.

Yours truly,

Wm. J. McCONN

NEW YORK, March 28th, 1863. }
 207 FOURTH AVENUE. }

DEAR SIR,—I observed in a recent number of *Wilkes' Spirit of the Times* that at a meeting of veterinary surgeons lately held in Philadelphia, it was proposed to form a "National Veterinary Association;" that resolutions to try and effect that purpose had been adopted; that Mr. Wisdom and yourself were requested to correspond with "such members of the profession as they may be acquainted with, soliciting their aid in support of the proposed measure and their attendance at the Convention when held." The wording of the resolutions would seem to debar all who are not veterinary surgeons from taking any part or interest in the formation of the association. Although not a veterinary surgeon, I am deeply interested in all that pertains to that much (in this country) neglected and important science. I have been for some years trying to elevate that branch of comparative anatomy to a more eminent position than it occupies at present. It will afford me much pleasure if I can in any manner assist you or your associates in perfecting the object proposed. I think with you that the time has come for veterinary surgeons and others practicing or interested in the art to claim for themselves a status to which they are, when properly educated, entitled. I think New York would be the most appropriate place for the first meeting, and that Agassiz would be the most suitable person to deliver the introductory lecture. I believe my suggestion would meet the views of our mutual friend Mr. Copeman. Hoping that your "long cherished desire" may be speedily accomplished,

I remain, very respectfully,

R. JENNINGS, Esq.,
Veterinary Surgeon.

JOHN BUSTEED.

124 MACDOUGAL STREET, }
 NEW YORK, May 4th, 1863. }

DEAR SIR,—In answer to your letter of May 2d for your kindness in appointing me as one of a committee for forming a National Association to advance veterinary science in this country, where it is greatly needed, I am obliged to decline the honor

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as my health is very much impaired by close attention to the duties of my profession, and I think of going to Europe with the hope of recuperating myself by a little rest. I must convey to you my best wishes for your success in so praiseworthy an undertaking even at this late date.

I remain,

Yours truly,

R. JENNINGS, V. S.

CHAS. C. GRICE, M.R.C.V.S.

UTICA, N. Y., April 4th, 1863.

DEAR SIR,—In acknowledging the receipt of your favor of yesterday I beg to present for the earnest consideration of yourself and associates the propriety of making some alteration in the name or title, "National Veterinary Association." You too well know the bitter enmity, strong prejudice, and mean petty jealousy now existing among veterinary surgeons in the U. S. Now it occurs to me that a plan can be devised by which all opposition may be neutralized, if not entirely overcome. The title, "National Veterinary Association," in my humble opinion, is another specimen of "lofty tumbling," of which we have already had too many. I know the delicate nature of this matter, and shall content myself with a simple statement of fact. If the gentlemen would consent to change the *title* of the association, say to the "*National Society for the Advancement of Veterinary Science*," or knowledge, a door would at once be opened for the admission of all competent and honorable workmen, all true patrons of our art, as well as those who admire knowledge simply for its real worth and power. By adopting such a *name* all petty feeling and strife may be prevented. Doctors know the value of this term; proper rules would effectually exclude all *unworthy* persons. "I for one" am anxious to see "free trade" principles adopted. The number of veterinary surgeons, "graduates" of European colleges, are but a mere fraction of those practicing under that title in our cities and towns, and, to be candid, I must admit that some of these "home-made vets.," by years of patient study, close and untiring observation, added to a long and extensive experience, in many respects are better "qualified to practice"

than some of the "two lesson" (graduates) from "abroad." Let a liberal *code* be adopted that will bring together a large portion of the "working class" of our profession. By all means hold the first meeting in New York City. Before preparing any remarks for the public, I should be pleased to get the views of yourself and colleagues upon the "amendment" to title herein advocated. Trusting that you will favor me by an early notice,

I remain, truly yours,

To ROBT. JENNINGS, V. S.

A. S. COPEMAN.

179 LEXINGTON AVENUE,
NEW YORK, 15 May, 1863. }

DEAR SIR,—I received yours of the 14th inst. appointing me to confer with the members of the veterinary profession in this city in making arrangements for a meeting to be held here on the 9th of June next. My acquaintance with my professional brethren is exceedingly limited, having been myself a short time resident in America. I will, however, be most happy to confer with them upon any subject pertaining to the advancement of veterinary education and science. I remain, dear sir,

Yours obediently,

R. JENNINGS, Esq.

A. LIAUTARD.

COLLEGE PLACE, BROOKLYN, N. Y.
May 15th, 1863. }

R. JENNINGS, Esq.

DEAR SIR,—I have just received your letter, the objects of which I highly approve, but as I have been out of practice some years, and am much engaged in other business, I am compelled to decline serving on the committee. At the same time I would suggest my adopted son, Alfred Large, veterinary surgeon and member of the R. C. V. S. of London, in my place. If this alteration meets the views of yourself and friends, write me by return of post, and he will attend to the matter without delay.

Yours very respectfully,

R. M. CURTIS.

98 EAST THIRTEENTH STREET, NEW YORK,
May 15th, 1863.

R. JENNINGS, Esq.

SIR,—I am in receipt of your favor of the 14th inst., and would most respectfully decline the honor you would confer upon me by appointing me upon a committee for the diffusion and advancement of veterinary knowledge. My business and other engagements are such at this particular time that it precludes me from taking an active share in this very meritorious work. Hoping my refusing to act may not seriously incommod you in your undertaking,

I am, yours very respectfully,

W. W. A. M. LOCKHAET, V.S.

The preceding letters are copied verbatim. Many others of a similar character were received by my father upon the same subject. My object in offering them is to give credit to whom it belongs, which our New York and Boston friends would rob Philadelphia of, which I presume they will not attempt to deny.

Very respectfully yours,

ROBERT JENNINGS, Jun.

PITTSBURG, PENNSYLVANIA.

CORRESPONDENCE.

Editor American Veterinary Review :—

If your readers are not "surfeited" with the subject of contagious pleuro-pneumonia, allow me to call the attention of the public to the necessary steps which the nature of this disease and its past history conclusively prove can *alone* be successful in exterminating the malady from our midst. Are the methods now employed by the different States such as give us a guarantee of a speedy and sure eradication of this plague from the present infected States, or that will prevent its westward spread? If they are not, what measures must we substitute to obtain the end in view? In other words, can we ever be entirely clear of pleuro-

pneumonia with the imperfect legislation and the many restrictions now placed upon us? We fear not. We propose then, to state in general terms what should be done, and compare this with the measures now taken in the different States and see how they correspond.

It is but just to say, however, that American people and American legislatures are almost, if not entirely, ignorant of the measures necessary to control this and other contagious diseases of the domestic animals. Hence, we should regard all present efforts as *gropings in the right direction*, and endeavor to patiently direct and develop rather than discourage and thwart, the only measures (imperfect and insufficient as they are) which our people will to-day endorse. All delays are indeed dangerous, and we must predict that more ultra measures than are now adopted must soon be put in force if the complete "stamping-out" of contagious pleuro-pneumonia from the U. S. is to be a success.

That this malady here exists; that it is contagious; that it is not indigenous to this country, that its incubative stage is uncertain in its duration, sometimes very short, again very long; that so-called "recovered" cases may and *do* spread the contagion to healthy animals with which they come in contact—all these are points settled beyond dispute. Starting with the above facts as a basis, and remembering that *different States* are invaded by this disease, the first and prime element of success in its extermination consists in *united* and *harmonious* action by each and all the States.

The short experience of the past proves conclusively that such a unanimity of action as is required to effect any *permanent* good is not to be hoped for as long as *individual States* control and direct this work. What then?

Plainly to place the matter in the hands of the National Government in such a manner as will best secure the sympathy and coöperation of every State, whether actually invaded, or in danger of becoming so.

There are a few prominent rocks upon which this effort is in danger of being wrecked, i.e.: political influences, the appointment of persons unacquainted with the nature or extent of the

disease, or of those who can be scared into inaction by personal grievances of the inconveniences which arise in infected districts. These difficulties and many more, *which exist now*, must be met and overcome.

The system of quarantine, if it is to be an *effectual aid* toward eradicating the lung-plague, must be more rigidly enforced. Restrictions much more severe than at present imposed must be placed upon the *movements* of cattle. *This is imperative.* So long as this avenue is left open to the contagion, we cannot expect any permanent diminution of the disease. Pleuro-pneumonia can never be exterminated from our borders by quarantine and disinfection alone, unless within infected farms, neighborhoods, and conveyances of all descriptions, the removal or introduction, or passing through of animals or other means of contagion be for a time *entirely suspended*. So long as cattle pass into and from infected yards or districts, to any and all parts with almost absolutely *no* restrictions, as at present, it savors of irony to say that we are getting rid of the disease. We are, at best, only getting rid of it at one place by sending it to another. There seems nothing plainer than that to kill every infected animal, and *every animal that has been exposed to the contagion*; to quarantine and disinfect the premises, vehicles, etc.; to forbid entirely all movements of cattle in such districts for from two to three months is the *cheapest* and possibly the *only* way of ever getting rid of this scourge. As has already been suggested, the National Commission should number a veterinarian as *one of its board*, and not a mere agent or hanger-on; that these Commissioners be appointed, conditional on the faithful and rigid discharge of their duties, for not less than ten years, and at such a salary as will command the undivided attention of *honest* and *proficient* men.

It is essential that the National and State authorities consist of men who have sufficient intimacy or knowledge of the disease in question to recognize it as a *specific, contagious, bovine* scourge, and as one that invariably presents its own peculiar pathological lesions; post-mortem appearances, which, when fully developed, are characteristic of this disease and no other; that they understand and guard against not only the probable but every possible

means of contagion, and be able to direct, with safety, all movements of cattle.

The Commissioners must be men who have their aim single toward the one object, *the radical extermination of the malady*. Toward this end all other interests must subserve. If not, then the present efforts to eradicate the lung-plague will prove abortive and of no permanent avail.

D. V. S.

EXCHANGES, ETC., RECEIVED.

EXCHANGES.—Journal de Zootechnie, Medical Record, Medical and Surgical Reporter, Live Stock Journal, Prairie Farmer, Country Gentleman, Scientific American, American Agriculturist, Turf, Field and Farm, Clinica Veterinaria, Annales de Belgique, Veterinary Journal, Veterinarian, Receuil de Medecine Veterinaire, Archives Veterinaires, Revue fur Thierheilkunde und Thierzucht, Revue fur Wissenschaftliche und Practische Thierheilkunde, Gazette Medicale, Annals of the Anatomical and Surgical Society, Monatsschrift des Vereines des Thierarzte.

PAMPHLETS.—Bulletin de la Société Centrale de Medecine Veterinaire, Announcement New Veterinary College (Grayfield, Edinburgh).

BOOKS.—Transactions of the American Medical Association, 1879.

JOURNALS.—The Illustrated Journal of Agriculture.

COMMUNICATIONS.—D. V. S., W. Manz, Student.